

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

B2 Sub D3

8. (Twice Amended)

The maize plant of claim 2 wherein said maize plant further comprises a genetic factor conferring male sterility.

10. (Amended)

The method of claim 9 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

B3

11. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 2, wherein said maize plant has derived at least 50% of its alleles from 34N16 and is capable of expressing a combination of at least two 34N16 traits selected from the group consisting of: high yield potential, with stable yields across yield levels, above average root strength, very good stay green, very good drought tolerance, above average early growth, above average test weight, very good dry down, and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

B4

14. (Amended)

The method of claim 13 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

15. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 21, wherein said maize plant has derived at least 50% of its alleles from 34N16 and is capable of expressing a combination of at least two 34N16 traits selected from the group consisting of: high yield potential, with stable yields across yield levels, above average root strength, very good stay green, very good drought tolerance, above average early growth, above average test weight, very good dry down, and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

## 18. (Amended)

*B5*  
The method of claim 17 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

## 19. (Amended)

*D*  
A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 16, wherein said maize plant has derived at least 50% of its alleles from 34N16 and is capable of expressing a combination of at least two 34N16 traits selected from the group consisting of: high yield potential, with stable yields across yield levels, above average root strength, very good stay green, very good drought tolerance, above average early growth, above average test weight, very good dry down, and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

*Sub D5*

## 21. (Twice Amended)

*B6*  
The maize plant of claim 20 wherein said maize plant further comprises a genetic factor conferring male sterility.

## 23. (Amended)

The method of claim 22 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

## 24. (Amended)

*B7*  
A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 24, wherein said maize plant has derived at least 50% of its alleles from 34N16 and is capable of expressing a combination of at least two 34N16 traits selected from the group consisting of: high yield potential, with stable yields across yield levels, above average root strength, very good stay green, very good drought tolerance, above average early

*B7 B8* growth, above average test weight, very good dry down, and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

27. (Amended)

The method of claim 26 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

*B8* 28. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 25, wherein said maize plant has derived at least 50% of its alleles from 34N16 and is capable of expressing a combination of at least two 34N16 traits selected from the group consisting of: high yield potential, with stable yields across yield levels, above average root strength, very good stay green, very good drought tolerance, above average early growth, above average test weight, very good dry down, and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

31. (Amended)

The method of claim 30 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

*B9* 32. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 29, wherein said maize plant has derived at least 50% of its alleles from 34N16 and is capable of expressing a combination of at least two 34N16 traits selected from the group consisting of: high yield potential, with stable yields across yield levels, above average root strength, very good stay green, very good drought tolerance, above average early growth, above average test weight, very good dry down, and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

*Sub 7*  
*D*  
*B 10*

Please add new claims 33 - 42 as follows:

**33. (New)**

A method of making a hybrid maize plant designated 34N16 comprising:  
crossing an inbred maize plant GE568102, deposited as \_\_\_\_\_ with a second inbred maize  
plant GE534776, deposited as \_\_\_\_\_; and  
developing from the cross a hybrid maize plant representative seed of which having been  
deposited under ATCC Accession Number \_\_\_\_\_.

**34. (New)**

A method of making an inbred maize plant comprising:  
obtaining the plant of claim 2 and  
applying double haploid methods to obtain a plant that is homozygous at essentially every locus,  
said plant having received all of its alleles from maize hybrid plant 34N16.

**35. (New)**

A method for producing an 34N16 progeny maize plant comprising:  
(a) growing the plant of claim 2, and obtaining self or sib pollinated seed therefrom;  
and  
(b) producing successive filial generations to obtain a 34N16 progeny maize plant.

**36. (New)**

A maize plant produced by the method of claim 35, said maize plant having received all  
of its alleles from hybrid maize plant 34N16.

**37. (New)**

A method for producing a population of 34N16 progeny maize plants comprising:  
(a) obtaining a first generation progeny maize seed produced by crossing the maize  
plant of claim 2 with a second maize plant;

(b) growing said first generation progeny maize seed to produce F<sub>1</sub> generation maize plants and obtaining self-pollinated seed from said F<sub>1</sub> generation maize plants; and

(c) repeating the steps of growing and harvesting successive filial generations to obtain a population of 34N16 progeny maize plants.

38. (New)

The population of 34N16 progeny maize plants produced by the method of claim 37, said population, on average, deriving at least 50% of its alleles from 34N16.

*B10*  
*Carneil'd*

39. (New)

A 34N16 maize plant selected from the population of 34N16 progeny maize plants produced by the method of claim 37, said maize plant deriving at least 50% of its alleles from 34N16.

40. (New)

The method of claim 37, further comprising applying double haploid methods to said F<sub>1</sub> generation maize plant or to a successive filial generation thereof.

*Scb 8*  
41. (New)

A method of producing a male sterile maize plant comprising transforming the maize plant of claim 2 with a genetic factor conferring male sterility.

42. (New)

The method of claim 41 wherein a male sterile maize plant is produced.